rather than build defenses available through correct hygiene and good nutritional standard?

V. H. PODSTATA.

THE Malaria Treatment of Paretic Dementia—It has been noticed frequently that patients with paresis have shown signs of improvement in their mental status during and following an intercurrent infection. For nearly forty years attempts have been made with various fever-producing agencies to arrest the disease, and in 1887 Wagner von Jauregg advocated inoculation with malaria; but only since 1917 has there been a definite effort to treat paresis by this method. Articles have appeared frequently in recent medical literature detailing methods and results. The contributions of Bunker and Kirby in a first report [1] and a second report [2] are to be mentioned, particularly because of their case discussions. They studied 106 patients of undoubted general paralysis inoculated with tertian malaria. Of these twenty-two died, eleven as a result of the treatment; twenty-six were unimproved; eight were slightly improved; thirteen attained moderate remissions, and thirty-seven full remissions. Wagner von Jauregg's technique is, as follows: "From 1 to 4 cc. of benign tertian malarial blood is injected, subcutaneously or intramuscularly. The patient is allowed to have eight or nine chills, occasionally ten or twelve. Quinin bisulphate is then given in doses of 7½ grains twice daily for three days; then 7½ grains is given once daily for fourteen days. Following the quinin treatment, six injections of neoarsphenamine are given, beginning with 0.3 gm. and increasing to 0.6 gm. one week apart."

McIntyre and McIntyre [3] in commenting on inoculation malaria say that "inoculation may be made at any time during the course of the malaria and does not have to be made during or after a chill. A strain may be passed from patient to patient indefinitely. Wagner von Jauregg passed one strain through thirty-seven generations. Some patients are immune to inoculation malaria. Attacks may vary from tertian to quotidian type. Inoculation malaria is very sensitive to quinin. Physical and mental improvement in malarial treated general paralytic persons, go hand in hand. In all possibility inoculation malaria becomes entirely asexual in type and cannot be transmitted by the mosquito." The same observers give the following contraindications for malaria treatment: 1. Rundown general physical condition with circulatory asthenia. 2. Anemia. 3. Kidney lesions. 4. Heart lesions with myocardial degeneration. 5. Patients with a persistent leukocytosis. 6. Meningovascular type of cerebrospinal syphilis with localized lesions is a poor risk because the malaria exaggerates these conditions.

At the University of California Medical School four cases of the expansive type have been treated with successful results. At least three have returned to work. Serologic results apparently vary greatly and cannot be correlated with the therapeutic results.

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1. Journ. A. M. A., February 20, 1925.
2. Arch. of Neurol. and Psychiatry, August, 1926.
3. Arch. of Neurol. and Psychiatry, August, 1926.

Obstetrics and Gynecology

IS the Dictum "Once a Caesarean, Always a Caesarean" Correct?—The strength of the uterine scar after a section is of vital importance, and yet our methods of judging this strength in a subsequent labor are not always conclusive. In the "high," or classical operation, the incision is made in that part of the uterus which, because of the contractions of the musculature, is constantly undergoing change in volume, a condition which interferes with the maintenance of apposition of the sutures and affects healing. If the sutures are tied too tightly there is a local necrosis of tissue which is already impaired by the process of involution. And, finally, if an infection of the suture line is added to the above factors we have a resulting scar which cannot stand the strain of labor. The frequency of rupture of the scar ranges from 4 to 10 per cent, although Holland, in England, in a large collective review reported that twenty-five out of every one hundred caesareanized women had a rupture in subsequent pregnancies.

More recently the low or cervical caesarean section has become popularized. The advantage of this type of incision is dependent upon the fact that the suture line is in the relaxed inactive portion of the uterus which permits good approximation of the cut surfaces and, therefore, a stronger scar. However, it must be emphasized that this type of operation is done on women usually advanced in labor and in whom the uterus is potentially or actually infected, a factor which markedly influences the healing of the suture line. Moreover, after a cervical section the scar is in that portion of the uterus which in subsequent labor becomes thinned out and stretched. It must be borne in mind that these conditions may offset the advantage of the site of incision. Because of its comparatively recent adoption, the frequency of rupture after the low incision is uncertain, although Witterwald [1] refers to his thirty-five cases of delivery after a previous cervical section in which the incidence of rupture was 3 per cent, and the writer recently operated on a woman whose uterus ruptured early in labor after a former low cervical section. Therefore neither the high nor the low incision can be considered free from the danger of rupture.

What should influence our method of treatment of caesareanized women coming to another labor? In the presence of pelvic disproportion, the correct method is obvious, namely, repeated section.

The following considerations may be of value in influencing our judgment as to choice of delivery. The history of a former febrile puerperium should suggest an infection and faulty healing of the uterine incision. The graphic chart of the woman's convalescence is a good index of the strength of the scar. Irregularity in uterine outline near term should suggest a weakness of the wall and threatening or even actual rupture.

If we decide to permit the woman to undergo a labor, delivery must take place in a hospital, where laparotomy can be quickly performed should the

1. Witterwald: Zentralblatt für Gynäkologie, 1926, 50, 592.

indications arise. The woman must be relieved of the strain of the second stage of labor as soon as possible by mid or low forceps, and episiotomy. One successful delivery via the natural channel does not guarantee the scar will not rupture in following labors, and the above precautions must be repeatedly observed.

ALICE F. MAXWELL.

Ophthalmology

THE Eye as an Indicator of Health—The eye holds within its small compass more possible diagnostic information than can be obtained from any other region of the body. Every diagnostician should equip himself with a binocular loupe and an ophthalmoscope, and perfect himself in their uses.

A blepharitis, stys, chalazions, or a chronic catarrhal conjunctivitis frequently denote eye strain, which may be responsible for many nervous and reflex symptoms as well as headaches.

Unusually soft eyeballs occur in diabetic coma. Puffiness of the lids suggests nephritis, trichinosis, or arsenic poisoning. Bilateral exophthalmos is a cardinal symptom of Graves' disease. A protrusion of one eye suggests a cavernous sinus thrombosis or a breaking through of an ethmoid or a frontal sinus. Jaundice of the sclera suggests a common duct obstruction.

Diplopia, except in rare instances, is due to a paresis or a paralysis of one of the muscles that rotate the eye: this paresis or paralysis may involve a single muscle or a group. The sixth nerve supplying the external rectus is the most frequently involved, but the third is frequently involved also, producing a ptosis or a ptosis and a paralysis of all muscles supplied by it. The most frequent cause of these nerve involvements is syphilis or an intercranial hemorrhage. A toxemia will sometimes produce a temporary paresis of one of these muscles.

Scars of the cornea, aside from those produced by traumatism, should be investigated. Scarring from an old interstitial keratitis is due to congenital syphilis. Those due to phlyctenulosis were probably caused by an active tuberculosis in childhood.

The pupil gives us a lot of information. Contraction is brought about by the oculomotor; dilatation by the sympathetic. Morphin causes a contraction, while cocain poisoning, shock, fainting, causes a dilatation. Inequality of the pupils is a sign to be seriously considered. While the pupils may be congenitally unequal, it is not safe to assume this to be the explanation. Many causes of neurosyphilis produce an anisocoria as the only evidence of abnormality. The well-known Argyll-Robertson pupil needs no comment.

In the use of the ophthalmoscope, always use one drop of a 2 per cent homatropin solution to dilate the pupil. There is no use in trying to look into a room through a keyhole when you can open the door. When the examination is finished, counteract the effects of the homatropin with a ¼ per cent eserin.

In examining the fundus, first learn the appearance of the normal fundus. The physician will be most interested in determining a choked disc. Arteriosclerosis, hemorrhages of the retina, embolism of the vessels and optic atrophy as well as cupping of the disc such as occurs in glaucoma.

Any modern textbook of ophthalmology contains cuts of the different diseases of the fundus, and by getting a mental picture of any given condition it is comparatively easy to make a diagnosis in the well pronounced lesions, leaving the finer points in diagnosis to the oculist.

WILLIAM A. BOYCE.

Orthopedics

FRACTURES of the Os Calcis—Crushing fractures of the os calcis cause severely crippling, permanent disabilities. Such fractures usually result from landing upon the feet after a fall from a height.

At the moment of impact the malleoli are driven toward the landing surface, the astragalus usually remains intact beneath them and the os calcis fractures, impacts and widens in its subastragaloid segment. Rarely it shatters or splits. This discussion will be confined to the depressed, impacted and laterally broadened type of distortion.

Probably both the ball of the foot and the bearing surface of the heel remain stationary upon the landing surface at the moment when the bone gives way downward and inward, between and beneath the malleoli. Pronation of the forefoot, bulging beneath the external malleolus and deflection of the heel upward and outward result in the characteristic deformity.

Treatment should be undertaken with the respect due a lesion which involves two major weight-bearing joints. Immobilizing in plaster, in the position of original deformity, results in severe crippling.

Pins, screws or ice-tongs inserted into the os calcis, or a Thomas wrench applied to the heel have been extensively utilized to pull down and realign the posterior fragment. Pull of the calf muscles is overcome by tenotomy or minimized by plantar flexion. Crushing between the jaws of a padded screw clamp or by mallet blows are resorted to to correct lateral spreading. Deformity may be corrected by such measures, but a discouragingly high degree of disability persists.

Disability is due chiefly to painful subastragaloid joint and is associated with loss of useful motion in that joint. Exostosis beneath the external malleolus is a less important factor.

After typical fracture of the os calcis, crippling disability can be minimized only by restoring the subastragaloid joint to a useful degree of painless function or by obliterating the joint.

Continued traction applied through caliper tongs so as to overcome the pull of the calf muscles and to restore length and alignment to the impacted os calcis, a method of treatment earlier used by Cotton, more recently perfected by Bull, does recover a definite percentage of fractured os calci with relatively painless and movable subastragaloid joints. Notwithstanding such traction is by far the best